STIC Search Report
Biotech-Chem Library

STIC Database Tracking Number: 153349

TO: Rei-Tsang Shiao **Location: 5a10 / 5c18** **Monday, May 16, 2005** **Art Unit: 1626** **Phone: 571-272-0707** **Serial Number: 10 / 734919**	**From: Jan Delaval** **Location: Biotech-Chem Library** **Remsen 1a51** **Phone: 571-272-2504** **jan.delaval@uspto.gov**

Search Notes

```
=> fil reg
FILE 'REGISTRY' ENTERED AT 12:58:32 ON 16 MAY 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file
provided by InfoChem.

STRUCTURE FILE UPDATES:   15 MAY 2005  HIGHEST RN 850445-20-4
DICTIONARY FILE UPDATES:  15 MAY 2005  HIGHEST RN 850445-20-4

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.

**********************************************************************
*                                                                    *
* The CA roles and document type information have been removed from *
* the IDE default display format and the ED field has been added,    *
* effective March 20, 2005.  A new display format, IDERL, is now     *
* available and contains the CA role and document type information. *
*                                                                    *
**********************************************************************

Crossover limits have been increased.  See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html

=> d sta que l23
L8              STR
```
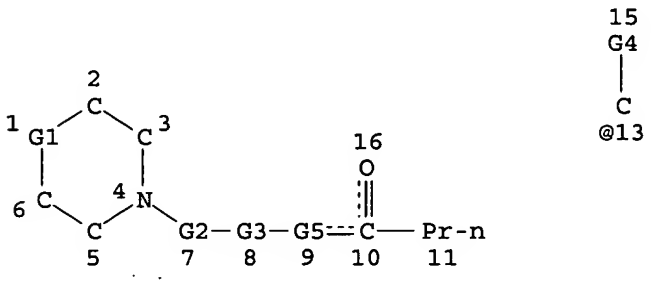
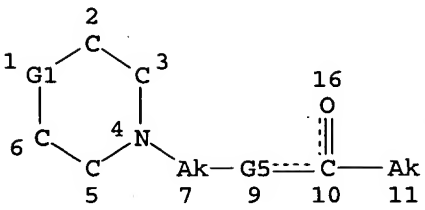




```
VAR G1=O/N
REP G2=(1-5) CH2
VAR G3=C/13
VAR G4=ME/ET
VAR G5=O/N
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC   1
NUMBER OF NODES IS  14

STEREO ATTRIBUTES: NONE
```

L10 STR



VAR G1=O/N
VAR G5=O/N
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

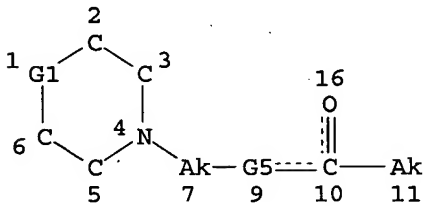
GRAPH ATTRIBUTES:
RSPEC 4
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

L12	882636	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	(46.402.1 OR 46.383.1)/RID
L13	953133	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	(NC2OC2 OR NC2NC2)/ES
L14	953133	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	(L12 OR L13)
L16		SCR	1839			
L18	2121	SEA	FILE=REGISTRY	SUB=L14	SSS FUL	L10 NOT L16
L19	520	SEA	FILE=REGISTRY	SUB=L18	CSS FUL	L10
L20	266	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	L19 NOT PMS/CI
L23	9	SEA	FILE=REGISTRY	SUB=L20	SSS FUL	L8

100.0% PROCESSED 178 ITERATIONS 9 ANSWERS
SEARCH TIME: 00.00.01

=> d sta que l27
L10 STR



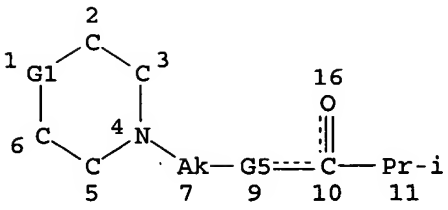
VAR G1=O/N
VAR G5=O/N
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC 4
NUMBER OF NODES IS 11

STEREO ATTRIBUTES: NONE

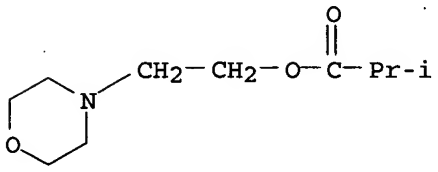
L12	882636	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	(46.402.1 OR 46.383.1)/RID
L13	953133	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	(NC2OC2 OR NC2NC2)/ES
L14	953133	SEA	FILE=REGISTRY	ABB=ON	PLU=ON	(L12 OR L13)
L16		SCR	1839			
L18	2121	SEA	FILE=REGISTRY	SUB=L14	SSS FUL	L10 NOT L16
L19	520	SEA	FILE=REGISTRY	SUB=L18	CSS FUL	L10

```
L20          266 SEA FILE=REGISTRY ABB=ON  PLU=ON  L19 NOT PMS/CI
L25              STR
```

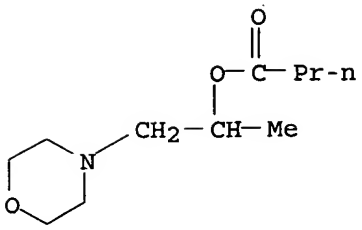



```
VAR G1=O/N
VAR G5=O/N
NODE ATTRIBUTES:
DEFAULT MLEVEL IS ATOM
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:
RSPEC   4
NUMBER OF NODES IS  11

STEREO ATTRIBUTES: NONE
L26            7 SEA FILE=REGISTRY SUB=L20 SSS FUL L25
L27            6 SEA FILE=REGISTRY ABB=ON  PLU=ON  L26 NOT BUTENYL


=> d his

     (FILE 'HOME' ENTERED AT 12:41:24 ON 16 MAY 2005)
               SET COST OFF

     FILE 'HCAPLUS' ENTERED AT 12:41:34 ON 16 MAY 2005
L1             1 S (US20040127564 OR US6664394 OR US20020143056 OR US6407107)/PN
               E GILBERT K/AU
L2            84 S E3-E12,E27-E30
               E FIFER E/AU
L3            36 S E4-E6
               SEL RN L1

     FILE 'REGISTRY' ENTERED AT 12:44:15 ON 16 MAY 2005
L4            15 S E1-E15
L5             9 S L4 AND (NC2OC2 OR NC2NC2)/ES
L6             5 S L5 AND (C6H13NO2 OR C6H14N2O OR C14H26N2O3)
L7             4 S L5 NOT L6
L8               STR
L9             3 S L8
L10              STR L8
L11            1 S L10 CSS SAM
L12       882636 S (46.402.1 OR 46.383.1)/RID
L13       953133 S (NC2OC2 OR NC2NC2)/ES
L14       953133 S L12,L13
L15           28 S L10 SAM SUB=L14
L16              SCR 1839
L17           50 S L10 NOT L16 SAM SUB=L14
L18         2121 S L10 NOT L16 FUL SUB=L14
               SAV L18 SHIAO734/A
L19          520 S L10 CSS FUL SUB=L18
               SAV L19 SHIAO734A/A
L20          266 S L19 NOT PMS/CI
L21              STR L10
L22          181 S L21 FUL SUB=L20
               SAV L22 SHIAO734B/A
               DEL SHIAO734B/A
```

```
L23             9 S L8 FUL SUB=L20
                  SAV L23 SHIAO734B/A
L24               STR L21
L25               STR L24
L26             7 S L25 FUL SUB=L20
L27             6 S L26 NOT BUTENYL
                  SAV L27 SHIAO734C/A
L28            15 S L7,L23,L27

     FILE 'HCAOLD' ENTERED AT 12:57:24 ON 16 MAY 2005
L29             0 S L28

     FILE 'HCAPLUS' ENTERED AT 12:57:27 ON 16 MAY 2005
L30             9 S L28
L31             3 S L30 AND L1-L3
L32             6 S L30 NOT L31
L33             9 S L30-L32

     FILE 'USPATFULL, USPAT2' ENTERED AT 12:58:18 ON 16 MAY 2005
L34             6 S L28

     FILE 'REGISTRY' ENTERED AT 12:58:32 ON 16 MAY 2005

=> d ide can tot l28

L28  ANSWER 1 OF 15  REGISTRY  COPYRIGHT 2005 ACS on STN
RN   486441-23-0  REGISTRY
ED   Entered STN:  06 Feb 2003
CN   Propanoic acid, 2-methyl-, 2-(4-morpholinyl)ethyl ester (9CI)  (CA INDEX
     NAME)
FS   3D CONCORD
MF   C10 H19 N O3
CI   COM
SR   Chemical Library
LC   STN Files:   CHEMCATS
```




```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**

L28  ANSWER 2 OF 15  REGISTRY  COPYRIGHT 2005 ACS on STN
RN   443796-22-3  REGISTRY
ED   Entered STN:  13 Aug 2002
CN   Butanoic acid, 1-methyl-2-(4-morpholinyl)ethyl ester (9CI)  (CA INDEX
     NAME)
FS   3D CONCORD
MF   C11 H21 N O3
SR   CA
LC   STN Files:   CA, CAPLUS, USPAT2, USPATFULL
```

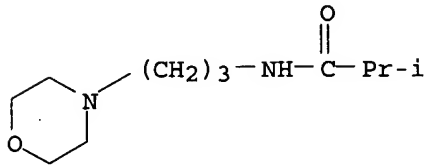


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

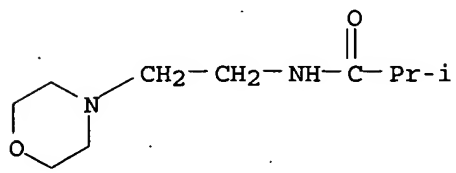
REFERENCE 1: 137:116959

L28 ANSWER 3 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN
RN 347907-28-2 REGISTRY
ED Entered STN: 24 Jul 2001
CN Propanamide, 2-methyl-N-[3-(4-morpholinyl)propyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H22 N2 O2
SR Chemical Library
LC STN Files: CHEMCATS



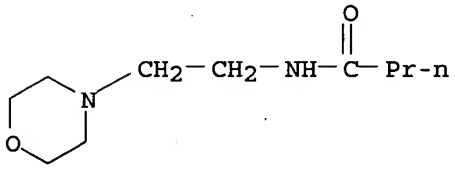
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L28 ANSWER 4 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN
RN 346698-42-8 REGISTRY
ED Entered STN: 19 Jul 2001
CN Propanamide, 2-methyl-N-[2-(4-morpholinyl)ethyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C10 H20 N2 O2
SR Chemical Library
LC STN Files: CHEMCATS



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L28 ANSWER 5 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN
RN **311802-63-8** REGISTRY
ED Entered STN: 28 Dec 2000
CN Butanamide, N-[2-(4-morpholinyl)ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)
MF C10 H20 N2 O2 . Cl H
SR CA
LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
CRN (300555-04-8)

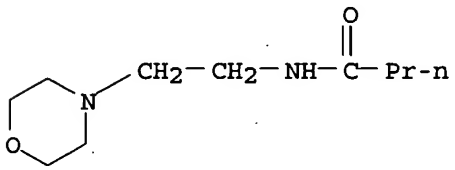


● HCl

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:29422

L28 ANSWER 6 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN
RN **300555-04-8** REGISTRY
ED Entered STN: 31 Oct 2000
CN Butanamide, N-[2-(4-morpholinyl)ethyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C10 H20 N2 O2
CI COM
SR CA
LC STN Files: CA, CAPLUS, CHEMCATS, TOXCENTER, USPAT2, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

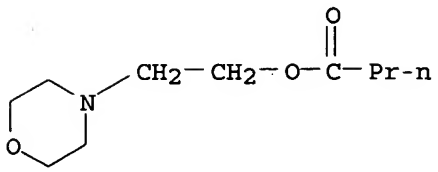
2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 134:29422

REFERENCE 2: 133:276028

L28 ANSWER 7 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN
RN **300555-03-7** REGISTRY
ED Entered STN: 31 Oct 2000
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME)
FS 3D CONCORD

MF C10 H19 N O3
CI COM
SR CA
LC STN Files: CA, CAPLUS, PROUSDDR, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

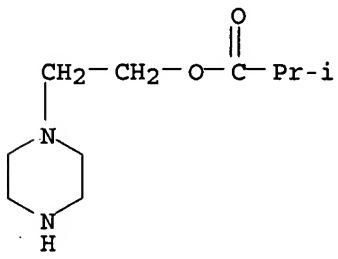
3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 137:116959

REFERENCE 2: 134:29422

REFERENCE 3: 133:276028

L28 ANSWER 8 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN
RN 52596-98-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN Propanoic acid, 2-methyl-, 2-(1-piperazinyl)ethyl ester, dihydrochloride (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 1-(2-Isobutyryloxyethyl)piperazine dihydrochloride
MF C10 H20 N2 O2 . 2 Cl H
LC STN Files: CA, CAPLUS
CRN (51479-44-8)



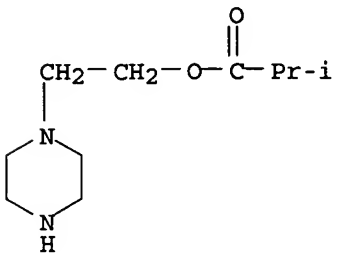
●2 HCl

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 81:3984

L28 ANSWER 9 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN
RN 51479-44-8 REGISTRY
ED Entered STN: 16 Nov 1984
CN Propanoic acid, 2-methyl-, 2-(1-piperazinyl)ethyl ester (9CI) (CA INDEX NAME)

OTHER NAMES:
CN 1-(2-Isobutyryloxyethyl)piperazine
CN 2-Piperazinoethyl isobutyrate
FS 3D CONCORD
MF C10 H20 N2 O2
CI COM
LC STN Files: CA, CAPLUS



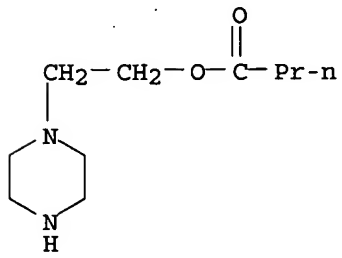
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 81:3984

REFERENCE 2: 80:83086

L28 ANSWER 10 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN
RN 51479-42-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN Butanoic acid, 2-(1-piperazinyl)ethyl ester (9CI) (CA INDEX NAME)
OTHER NAMES:
CN 2-Piperazinoethyl butyrate
FS 3D CONCORD
MF C10 H20 N2 O2
LC STN Files: CA, CAPLUS



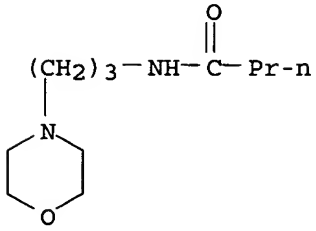
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 80:83086

L28 ANSWER 11 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN
RN 49808-87-9 REGISTRY
ED Entered STN: 16 Nov 1984

CN Butanamide, N-[3-(4-morpholinyl)propyl]- (9CI) (CA INDEX NAME)
FS 3D CONCORD
MF C11 H22 N2 O2
CI COM
LC STN Files: BEILSTEIN*, CA, CAPLUS, CHEMCATS
(*File contains numerically searchable property data)

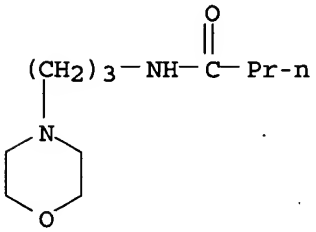


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 79:105217

L28 ANSWER 12 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN
RN 49808-42-6 REGISTRY
ED Entered STN: 16 Nov 1984
CN Butanamide, N-[3-(4-morpholinyl)propyl]-, monohydrochloride (9CI) (CA INDEX NAME)
MF C11 H22 N2 O2 . Cl H
LC STN Files: CA, CAPLUS
CRN (49808-87-9)



● HCl

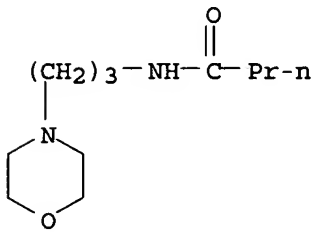
1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 79:105217

L28 ANSWER 13 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN
RN 49808-41-5 REGISTRY
ED Entered STN: 16 Nov 1984
CN Butanamide, N-[3-(4-morpholinyl)propyl]-, compd. with 2,4,6-trinitrophenol (9CI) (CA INDEX NAME)
MF C11 H22 N2 O2 . x C6 H3 N3 O7
LC STN Files: CA, CAPLUS

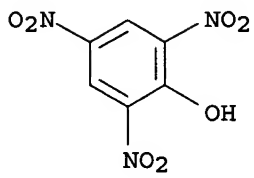
CM 1

CRN 49808-87-9
CMF C11 H22 N2 O2



CM 2

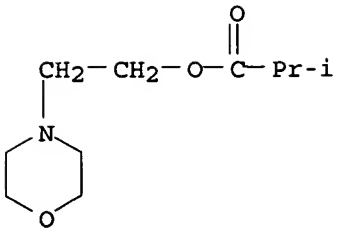
CRN 88-89-1
CMF C6 H3 N3 O7



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 79:105217

L28 ANSWER 14 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN
RN 23866-08-2 REGISTRY
ED Entered STN: 16 Nov 1984
CN Propanoic acid, 2-methyl-, 2-(4-morpholinyl)ethyl ester, hydrochloride (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 4-Morpholineethanol, isobutyrate (ester), hydrochloride (8CI)
CN Isobutyric acid, 2-morpholinoethyl ester hydrochloride (8CI)
MF C10 H19 N O3 . Cl H
LC STN Files: CA, CAPLUS
CRN (486441-23-0)



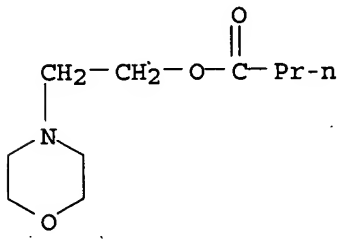
● HCl

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 90:197759

REFERENCE 2: 71:112868

L28 ANSWER 15 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN
RN **23866-07-1** REGISTRY
ED Entered STN: 16 Nov 1984
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester, hydrochloride (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 4-Morpholineethanol, butyrate (ester), hydrochloride (8CI)
CN Butyric acid, 2-morpholinoethyl ester hydrochloride (8CI)
MF C10 H19 N O3 . Cl H
LC STN Files: CA, CAPLUS, PROUSDDR, SYNTHLINE, TOXCENTER, USPAT2, USPATFULL
CRN (300555-03-7)



● HCl

4 REFERENCES IN FILE CA (1907 TO DATE)
4 REFERENCES IN FILE CAPLUS (1907 TO DATE)

REFERENCE 1: 141:254037

REFERENCE 2: 134:29422

REFERENCE 3: 90:197759

REFERENCE 4: 71:112868

```
=> fil hcaplus
FILE 'HCAPLUS' ENTERED AT 12:58:52 ON 16 MAY 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)
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FILE COVERS 1907 - 16 May 2005  VOL 142 ISS 21
FILE LAST UPDATED: 15 May 2005  (20050515/ED)

New CAS Information Use Policies, enter HELP USAGETERMS for details.

 This file contains CAS Registry Numbers for easy and accurate
 substance identification.

=> d l33 all hitstr tot

L33  ANSWER 1 OF 9  HCAPLUS  COPYRIGHT 2005 ACS on STN
AN   2004:561382  HCAPLUS
DN   141:254037
ED   Entered STN:  14 Jul 2004
TI   Macrophage production of inflammatory mediators is potently inhibited by a
     butyric acid derivative demonstrated to inactivate antigen-stimulated T
     cells
AU   Soderberg, Lee S. F.; Boger, Susan; Fifer, E. Kim; Gilbert,
     Kathleen M.
CS   Department of Microbiology and Immunology, College of Medicine, University
     of Arkansas for Medical Sciences, Little Rock, AR, 72205, USA
SO   International Immunopharmacology (2004), 4(9), 1231-1239
     CODEN: IINMBA; ISSN: 1567-5769
PB   Elsevier Science B.V.
DT   Journal
LA   English
CC   1-7 (Pharmacology)
AB   The butyric acid derivative, 2-(4-morpholinyl) Et butyrate hydrochloride
     (MEB), has been reported to induce antigen-specific T cell
     unresponsiveness and to block T cell-mediated graft-vs.-host disease.  As
     a potential therapeutic agent, it was important to determine the effects of MEB
     on other cells that contribute to immunopathol.  Accordingly, the authors
     tested the effects of MEB on macrophage functions.  MEB did not affect
     macrophage viability, phagocytic activity, or the activation-induced
     up-regulation of mols. associated with antigen presentation: MHC-II, CD86,
     CD40, or ICAM-1.  However, MEB potently inhibited activation-induced
     production of inflammatory mediators, including tumor necrosis factor-α
     (TNF-α), IL-6, chemokine CCL2 and nitric oxide (NO).  MEB inhibited
     the induction of NO synthase (NOS2), which is necessary for inducible NO,
     and inhibited nuclear translocation of NFκB, suggesting that MEB
     interferes with the signaling pathway involved in NOS2 induction.  Thus,
     while inducing specific T cell unresponsiveness, MEB also exerts
     anti-inflammatory activity by acting on macrophages to suppress production of
     cytokines and NO.
ST   butyric acid deriv immunomodulator macrophage inflammatory mediator
IT   Transcription factors
```

RL: BSU (Biological study, unclassified); BIOL (Biological study)
(NF-κB (nuclear factor of κ light chain gene enhancer in B-cells); macrophage production of inflammatory mediators is potently inhibited by butyric acid derivative demonstrated to inactivate antigen-stimulated T cells)

IT Immunomodulators
Macrophage
(macrophage production of inflammatory mediators is potently inhibited by butyric acid derivative demonstrated to inactivate antigen-stimulated T cells)

IT Interleukin 6
Monocyte chemoattractant protein-1
Tumor necrosis factors
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(macrophage production of inflammatory mediators is potently inhibited by butyric acid derivative demonstrated to inactivate antigen-stimulated T cells)

IT 10102-43-9, Nitric oxide, biological studies 501433-35-8, Nitric oxide synthase 2
RL: BSU (Biological study, unclassified); BIOL (Biological study)
(macrophage production of inflammatory mediators is potently inhibited by butyric acid derivative demonstrated to inactivate antigen-stimulated T cells)

IT **23866-07-1**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(macrophage production of inflammatory mediators is potently inhibited by butyric acid derivative demonstrated to inactivate antigen-stimulated T cells)

RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD

RE

(1) Albina, J; Cancer Metastasis Rev 1998, V17, P39 HCAPLUS
(2) Alexander, D; Transpl Immunol 2004, V4, P46
(3) Alleva, D; Diabetes 2004, V49, P1106
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(7) Gilbert, K; J Immunol 2003, V151, P1245
(8) Gilbert, K; J Pharmacol Exp Ther 2003, V294, P1146
(9) Gilbert, K; J Pharmacol Exp Ther 2003, V294, P1146
(10) Hoffman, R; J Immunol 2004, V151, P1508
(11) Liew, F; Immunol Lett 1994, V43, P95 HCAPLUS
(12) Millard, A; Clin Exp Immunol 2003, V130, P245
(13) Misumi, M; J Surg Res 2004, V55, P115
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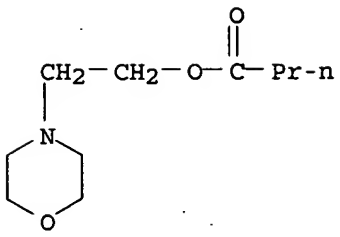
(16) Rahman, M; Blood 2003, V101, P3451 HCAPLUS
(17) Saemann, M; FASEB J 2003, V14, P2380
(18) Saemann, M; J Leukoc Biol 2002, V71, P238 HCAPLUS
(19) Segain, J; Gut 2003, V47, P397
(20) Soderberg, L; J Leukoc Biol 1995, V57, P135 HCAPLUS
(21) Stamler, J; Cell 1994, V78, P931 MEDLINE
(22) Trebilcock, G; Gerontology 1996, V42, P137 HCAPLUS
(23) Weninger, W; J Exp Med 2004, V194, P953

IT **23866-07-1**
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(macrophage production of inflammatory mediators is potently inhibited by butyric acid derivative demonstrated to inactivate antigen-stimulated T cells)

RN 23866-07-1 HCAPLUS
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester, hydrochloride (9CI) (CA INDEX NAME)



● HCl

L33 ANSWER 2 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2002:556011 HCAPLUS
DN 137:116959
ED Entered STN: 26 Jul 2002
TI Amine compounds for resist compositions and patterning process
IN Hatakeyama, Jun; Kobayashi, Tomohiro; Watanabe, Takeru; Nagata, Takeshi
PA Shin-Etsu Chemical Co., Ltd., Japan
SO U.S. Pat. Appl. Publ., 32 pp.
CODEN: USXXCO
DT Patent
LA English
IC ICM G03F007-038
ICS G03F007-38; G03F007-40; G03F007-20; G03F007-30; C07D047-02
INCL 430270100
CC 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 2002098443	A1	20020725	US 2001-994808	20011128
	US 6749988	B2	20040615		
	JP 2002226470	A2	20020814	JP 2001-359331	20011126
	TW 555754	B	20031001	TW 2001-90129581	20011129
PRAI	JP 2000-362800	A	20001129		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
US 2002098443	ICM	G03F007-038
	ICS	G03F007-38; G03F007-40; G03F007-20; G03F007-30; C07D047-02
	INCL	430270100
US 2002098443	NCL	430/270.100; 430/296.000; 430/325.000; 430/326.000; 430/327.000; 430/328.000; 430/330.000; 430/331.000; 540/467.000; 540/480.000; 544/059.000; 544/060.000; 544/170.000; 544/171.000; 544/173.000; 544/174.000; 544/175.000; 544/177.000; 546/248.000; 546/339.000; 546/340.000; 546/341.000; 546/342.000; 546/344.000; 548/215.000; 548/570.000; 548/571.000; 548/573.000; 548/574.000; 548/579.000; 548/950.000; 548/954.000; 548/968.000; 548/969.000
	ECLA	G03F007/004D; G03F007/038C; G03F007/039C

OS MARPAT 137:116959
AB Disclosed are novel amine compds. having a nitrogen-containing cyclic structure and a hydrating group such as a hydroxy, ether, ester, carbonyl, carbonate group or lactone ring which are useful as basic compds. for use

in resist compns. for preventing a resist film from thinning and also for enhancing the resolution and focus margin of resist. Also disclosed resist compns. comprising the inventive amine derivs. as basic compds.

ST amine compd photoresist UV resist compn lithog photolithog; photoresist UV resist electron beam amine compd lithog

IT Photoresists
(UV; amine compds. as basic materials for resist compns.)

IT Electron beam resists
Photolithography
(amine compds. as basic materials for resist compns.)

IT 1199-83-3P 4151-03-5P 13276-24-9P 20120-24-5P 20768-93-8P
21193-86-2P 22041-18-5P 22041-19-6P 22041-21-0P 23573-93-5P
24589-56-8P 33611-43-7P 35855-10-8P 54996-29-1P 55643-40-8P
58583-90-7P 60254-45-7P 62005-12-3P 62260-79-1P 63431-38-9P
67411-59-0P 88217-57-6P 90727-03-0P 100050-34-8P 167279-38-1P
300555-03-7P 443795-94-6P 443795-95-7P 443795-96-8P
443795-97-9P 443795-98-0P 443795-99-1P 443796-00-7P 443796-01-8P
443796-02-9P 443796-03-0P 443796-04-1P 443796-05-2P 443796-06-3P
443796-07-4P 443796-08-5P 443796-09-6P 443796-10-9P 443796-11-0P
443796-12-1P 443796-13-2P 443796-14-3P 443796-15-4P 443796-16-5P
443796-17-6P 443796-18-7P 443796-19-8P 443796-20-1P 443796-21-2P
443796-22-3P 443796-23-4P 443796-24-5P 443796-25-6P
443796-26-7P 443796-27-8P
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(amine compds. as basic materials for resist compns.)

IT 24979-74-6 129674-22-2 158593-28-3 218796-79-3 279243-86-6
326925-70-6 336620-26-9 443796-28-9 443796-30-3
RL: TEM (Technical or engineered material use); USES (Uses)
(amine compds. as basic materials for resist compns.)

IT 117458-06-7
RL: TEM (Technical or engineered material use); USES (Uses)
(crosslinker; amine compds. as basic materials for resist compns.)

IT 79-03-8, Propanoyl chloride 79-22-1, Methyl chloroformate 80-62-6, Methyl methacrylate 96-32-2, Methyl bromoacetate 96-33-3, Methyl acrylate 106-90-1, Glycidyl acrylate 110-89-4, Piperidine, reactions 110-91-8, Morpholine, reactions 121-44-8, Triethylamine, reactions 123-75-1, Pyrrolidine, reactions 123-90-0, Thiomorpholine 140-88-5, Ethyl acrylate 141-32-2, Butyl acrylate 141-75-3, Butyric chloride 142-61-0, Hexanoyl chloride 497-23-4, 2-(5H)-Furanone 547-65-9, α-Methylene-γ-butyrolactone 622-40-2, 4-(2-Hydroxyethyl)morpholine 628-12-6, 2-Methoxyethyl chloroformate 1192-30-9, Tetrahydrofurfuryl bromide 2109-66-2, 4-(2-Hydroxypropyl)morpholine 2399-48-6, Tetrahydrofurfuryl acrylate 2955-88-6, 1-(2-Hydroxyethyl)pyrrolidine 3040-44-6, 1-(2-Hydroxyethyl)piperidine 3066-71-5, Cyclohexyl acrylate 3121-61-7, 2-Methoxyethyl acrylate 3282-30-2, Pivaloyl chloride 3393-45-1, 5,6-Dihydro-2H-pyran-2-one 3970-21-6, 2-Methoxyethoxymethyl chloride 6425-32-7, 3-Morpholino-1,2-propane diol 7251-90-3, 2-Butoxyethyl acrylate 7328-18-9, 2-(2-Methoxyethoxy)ethyl acrylate 13831-31-7, Acetoxyacetyl chloride 16024-55-8, 2-Methoxyethoxyacetyl chloride 24424-99-5, Di-tert-butyl pyrocarbonate 38870-89-2, Methoxyacetyl chloride 55231-03-3, 2-Acetoxyethyl acrylate 62921-74-8, 2-[2-(2-Methoxyethoxy)ethoxy]ethyl p-toluenesulfonate 62921-76-0 163750-71-8 328249-37-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(in preparation of amine derivs.)

IT 6293-66-9 138529-81-4 144317-44-2 266308-64-9
RL: TEM (Technical or engineered material use); USES (Uses)
(photoacid generator; amine compds. as basic materials for resist compns.)

RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE

(1) Anon; JP 43019115 1968 HCAPLUS
(2) Anon; JP 60-218642 1985 HCAPLUS
(3) Anon; JP 60-218642 1985 HCAPLUS
(4) Anon; JP 63027829 A 1988 HCAPLUS
(5) Anon; JP 90027660 B 1990
(6) Anon; JP 5113666 A 1993
(7) Anon; JP 5232706 A 1993
(8) Anon; JP 5249683 A 1993
(9) Anon; JP 63149640 A 1998 HCAPLUS
(10) Anon; WO 9837458 A1 1998 HCAPLUS
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(14) Crivello; US 5310619 A 1994 HCAPLUS
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(18) Ito; US 4491628 A 1985 HCAPLUS
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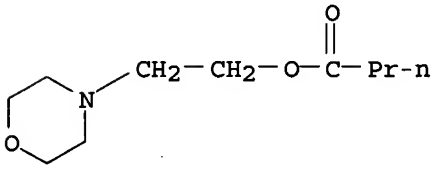
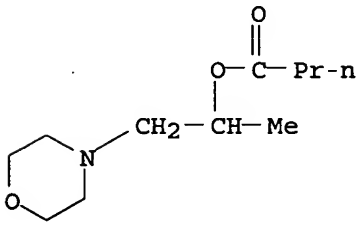
(21) Tsou; Journal of Medicinal Chemistry. 1963, V6(4), P435 HCAPLUS

IT **300555-03-7P 443796-22-3P**
RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)
(amine compds. as basic materials for resist compns.)

RN 300555-03-7 HCAPLUS
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME)



RN 443796-22-3 HCAPLUS
CN Butanoic acid, 1-methyl-2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME)



L33 ANSWER 3 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:861641 HCAPLUS
DN 134:29422
ED Entered STN: 08 Dec 2000
TI Preparation of butyrate derivatives as inactivators of antigen-specific T cells.
IN **Gilbert, Kathleen; Fifer, E. Kim**

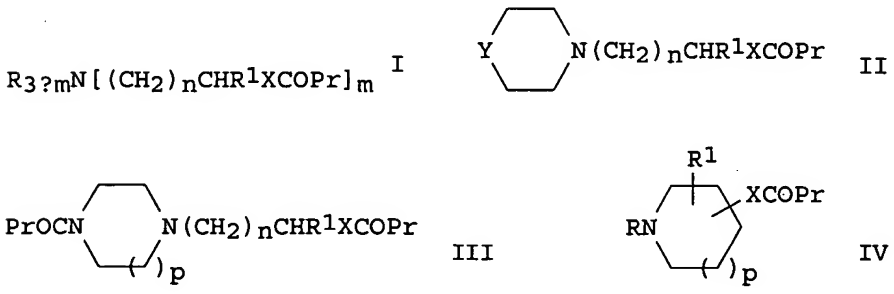
PA Board of Trustees of the University of Arkansas, USA
SO PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DT Patent
LA English
IC ICM C07C229-00
ICS A61K031-21; A61K031-215
CC 28-13 (Heterocyclic Compounds (More Than One Hetero Atom))
Section cross-reference(s): 1, 23, 27
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2000073257	A1	20001207	WO 2000-US14523	20000526 <--
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6407107	B1	20020618	US 2000-579602	20000526 <--
US 2002143056	A1	20021003	US 2002-122277	20020412 <--
US 6664394	B2	20031216		
US 2004127564	A1	20040701	US 2003-734919	20031212 <--
PRAI US 1999-136579P	P	19990528 <--		
US 2000-579602	A3	20000526 <--		
US 2002-122277	A3	20020412 <--		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
WO 2000073257	ICM	C07C229-00
	ICS	A61K031-21; A61K031-215
US 6407107	NCL	514/237.800; 544/168.000
	ECLA	C07C219/06; C07D211/46; C07D295/08B1F; C07D295/12B1D2; C07D295/18B1B <--
US 2002143056	NCL	544/386.000
	ECLA	C07C219/06; C07D211/46; C07D295/08B1F; C07D295/12B1D2; C07D295/18B1B <--
US 2004127564	NCL	514/547.000; 514/616.000; 560/250.000; 564/152.000
	ECLA	C07C219/06; C07D211/46; C07D295/08B1F; C07D295/12B1D2; C07D295/18B1B <--

OS MARPAT 134:29422
GI



AB Title compds. (I-IV; n = 1-5; p = 0-3; m = 1-3; X = O, NH; Y = CH2, O, S, NH, NR; R = aliphatic, alicyclic; R1 = H,, Me, Et; with provisos), were prepared Thus, 4-(2-hydroxyethyl)morpholine in CHCl3 was treated with

butyryl chloride under cooling to give 70% 1-(4-morpholinyl)ethyl butyrate (MEB). Mice treated with MEB on day 2 or 3 following initial immunization with ovalbumin showed a decrease of ≥80% in production of IgG2a and IgG2b.

ST butyrate prepn T cell inactivator; butanoylpiperazinylethyl butanoate prepn T cell inactivator; morpholinylethyl butyrate prepn T cell inactivator; anticancer butyrate prodrug prepn; immunosuppressant butyrate prepn

IT Transplant rejection
(allotransplant, treatment; preparation of butyrate derivs. as inactivators of antigen-specific T cells)

IT Neuroglia
(glioma, treatment; preparation of butyrate derivs. as inactivators of antigen-specific T cells)

IT T cell (lymphocyte)
(inactivators; preparation of butyrate derivs. as inactivators of antigen-specific T cells)

IT Antiarthritics
Antidiabetic agents
Immunosuppressants
(preparation of butyrate derivs. as inactivators of antigen-specific T cells)

IT Drug delivery systems
(prodrugs; preparation of butyrate derivs. as inactivators of antigen-specific T cells)

IT Antitumor agents
Kidney, neoplasm
Leukemia
Lung, neoplasm
Lupus erythematosus
Multiple sclerosis
Ovary, neoplasm
(treatment; preparation of butyrate derivs. as inactivators of antigen-specific T cells).

IT **23866-07-1P** 59090-00-5P 211301-63-2P **300555-03-7P** **300555-04-8P** 311802-59-2P **311802-63-8P** 311802-65-0P 311802-67-2P
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of butyrate derivs. as inactivators of antigen-specific T cells)

IT 102-71-6, Triethanolamine, reactions 103-76-4, 1-(2-Hydroxyethyl)piperazine 106-52-5, 4-Hydroxy-1-methylpiperidine 141-75-3, Butyryl chloride 622-40-2, 4-(2-Hydroxyethyl)morpholine 2038-03-1, 4-(2-Aminoethyl)morpholine
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of butyrate derivs. as inactivators of antigen-specific T cells)

RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD

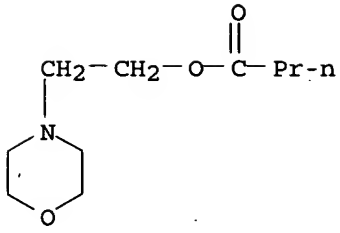
RE

(1) Adeka Argus Chem Co Ltd; JP 51023537 A 1976 HCAPLUS

IT **23866-07-1P** **300555-03-7P** **300555-04-8P** **311802-63-8P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of butyrate derivs. as inactivators of antigen-specific T cells)

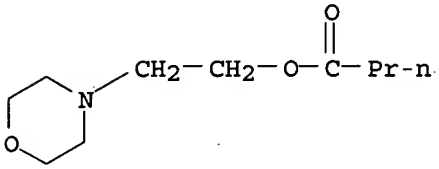
RN 23866-07-1 HCAPLUS

CN Butanoic acid, 2-(4-morpholinyl)ethyl ester, hydrochloride (9CI) (CA INDEX NAME)

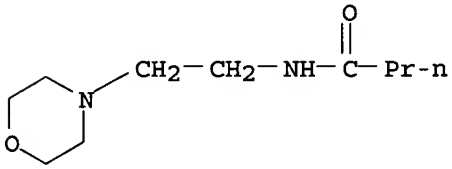


● HCl

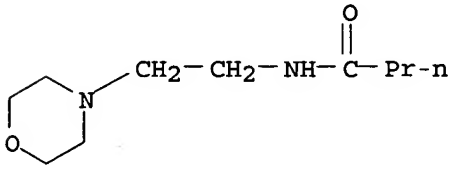
RN 300555-03-7 HCAPLUS
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME)



RN 300555-04-8 HCAPLUS
CN Butanamide, N-[2-(4-morpholinyl)ethyl]- (9CI) (CA INDEX NAME)



RN 311802-63-8 HCAPLUS
CN Butanamide, N-[2-(4-morpholinyl)ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

L33 ANSWER 4 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 2000:614471 HCAPLUS
DN 133:276028
ED Entered STN: 06 Sep 2000

TI Potential clinical use of butyric acid derivatives to induce antigen-specific T cell inactivation

AU **Gilbert, Kathleen M.**; Wahid, Rahnuma; Fecher, Nuria Portabella; Freeman, James P.; **Fifer, E. Kim**

CS Departments of Microbiology and Immunology, University of Arkansas for Medical Sciences, Little Rock, AR, USA

SO Journal of Pharmacology and Experimental Therapeutics (2000), 294(3), 1146-1153
CODEN: JPETAB; ISSN: 0022-3565

PB American Society for Pharmacology and Experimental Therapeutics

DT Journal

LA English

CC 1-7 (Pharmacology)

AB Compds. with the capacity to induce antigen-specific unresponsiveness in CD4+ T cells can in some clin. situations be more beneficial than general immune suppressants. Newly synthesized ester, ester/amide, and amide derivs. of butyrate with the capacity to induce antigen-specific T cell unresponsiveness in vivo and in vitro were tested here. The ester and ester/amide derivs. of butyrate were shown to block proliferation by interleukin-2-stimulated murine Th1 cells in vitro. A 3-day treatment with these same two derivs. also suppressed a primary antibody response to a thymus-dependent antigen in mice. In addition, even a single injection of the ester derivative of n-butyrate 2-(4-morpholinyl)ethyl butyrate hydrochloride (MEB) on day 2 or 3 after immunization suppressed the generation of memory T cells capable of proliferating to antigen or of promoting a secondary antigen-specific antibody response. MEB also induced antigen-specific unresponsiveness in antigen-activated, but not resting or interleukin-2-activated, T cells in vitro. DNA anal. showed that regardless of when MEB was added to the cultures, it induced the eventual G1 sequestration of essentially all activated Th1 cells. Because G1 blockade is associated with Th1 cell anergy, this finding suggests that MEB has the potential to induce anergy in already-activated CD4+ T cells. Taken together, the results presented here establish MEB as a novel means of inducing anergy in CD4+ T cells both in vitro and in vivo and underscore the likelihood that MEB and/or other butyrate derivs. can be used as immunotherapeutic reagents.

ST butyrate derivs T cell anergy immunity

IT Immune tolerance
(anergy; potential clin. use of butyric acid derivs. to induce antigen-specific T cell inactivation)

IT T cell (lymphocyte)
(memory; potential clin. use of butyric acid derivs. to induce antigen-specific T cell inactivation)

IT CD4-positive T cell
(potential clin. use of butyric acid derivs. to induce antigen-specific T cell inactivation)

IT 211301-63-2 **300555-03-7 300555-04-8**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(potential clin. use of butyric acid derivs. to induce antigen-specific T cell inactivation)

RE.CNT 17 THERE ARE 17 CITED REFERENCES AVAILABLE FOR THIS RECORD

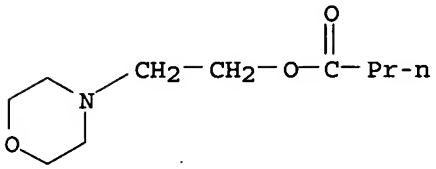
RE

(1) Bai, X; Clin Exp Immunol 1998, V111, P205 HCAPLUS
(2) Daniel, P; Clin Chim Acta 1989, V181, P255 HCAPLUS
(3) Garside, P; Science 1998, V281, P96 HCAPLUS
(4) Gaupp, S; J Neuroimmunol 1997, V79, P129 HCAPLUS
(5) Gilbert, K; J Immunol 1990, V144, P2063 MEDLINE
(6) Gilbert, K; J Immunol 1993, V151, P1245 HCAPLUS
(7) Griffin, J; Immunopharmacology 2000, V46, P123 HCAPLUS
(8) Kruh, J; C R Seances Soc Biol Fil 1992, V186, P12 HCAPLUS
(9) Kuhn, R; Science 1991, V254, P707 MEDLINE

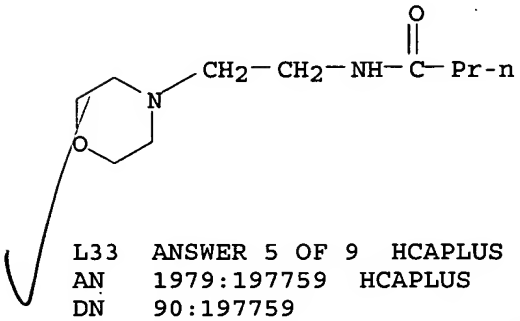
(10) Maclennan, I; Immunol Rev 1997, V156, P54
(11) Meyer, A; J Immunol 1996, V157, P4230 HCAPLUS
(12) Miller, A; Eur J Cancer Clin Oncol 1987, V23, P1283 MEDLINE
(13) Novogrodsky, j; Cancer 1983, V51, P9
(14) Perrine, S; Am J Pediatr Hematol Oncol 1994, V16, P67 MEDLINE
(15) Steele, D; J Exp Med 1996, V183, P699 HCAPLUS
(16) Stevens, T; Nature (Lond) 1988, V334, P255 HCAPLUS
(17) Williams, M; J Immunol 1990, V144, P1208 HCAPLUS

IT **300555-03-7 300555-04-8**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(potential clin. use of butyric acid derivs. to induce antigen-specific T cell inactivation)

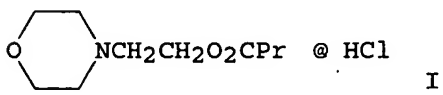
RN 300555-03-7 HCAPLUS
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME)



RN 300555-04-8 HCAPLUS
CN Butanamide, N-[2-(4-morpholinyl)ethyl]- (9CI) (CA INDEX NAME)



L33 ANSWER 5 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1979:197759 HCAPLUS
DN 90:197759
ED Entered STN: 12 May 1984
TI Study of compounds with potential antiparasitic activity. I. New aliphatic esters of N-ethanolmorpholine
AU Kadlubowski, Roscislaw
CS Inst. Biol. Morfol., Akad. Med., Lodz, Pol.
SO Wiadomosci Parazytologiczne (1978), 24(5), 575-9
CODEN: WIPAAZ; ISSN: 0043-5163
DT Journal
LA Polish
CC 1-5 (Pharmacodynamics)
GI



I

AB Eight aliphatic esters of N-ethanolmorpholine had greater in vivo anthelmintic properties than piperazine adipate and weaker trichomonacidal

properties than phenol or metronidazole. N-ethanolmorpholine butyrate-HCl (I) [**23866-07-1**] was most active anthelmintic .

ST ethanolmorpholine deriv anthelmintic trichomonacidal

IT Trichomonas
(control of, ethanolmorpholine aliphatic esters in relation to)

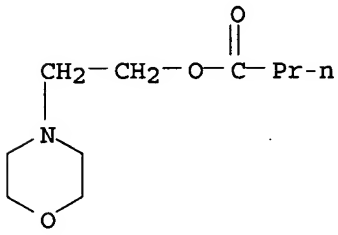
IT Anthelmintics
(ethanolmorpholine aliphatic esters as)

IT 23866-04-8 23866-05-9 23866-06-0 **23866-07-1**
23866-08-2 23866-09-3 23866-10-6 23866-11-7
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(anthelmintic and trichomonacidal activity of)

IT **23866-07-1 23866-08-2**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BIOL (Biological study)
(anthelmintic and trichomonacidal activity of)

RN 23866-07-1 HCAPLUS

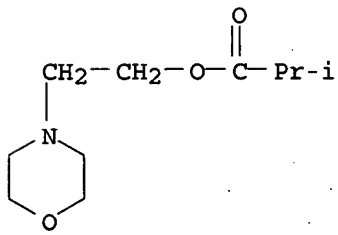
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester, hydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 23866-08-2 HCAPLUS

CN Propanoic acid, 2-methyl-, 2-(4-morpholinyl)ethyl ester, hydrochloride (9CI) (CA INDEX NAME)



● HCl

L33 ANSWER 6 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN

AN 1974:403984 HCAPLUS

DN 81:3984

ED Entered STN: 12 May 1984

TI Neuroleptic and antiemetic dibenzo[b,f][1,4]oxazepine derivatives

IN Schmutz, Jean; Hunziker, Fritz; Kuenzle, Franz M.

PA Dr. A. Wander, A.-G.
SO Fr. Demande, 20 pp. Addn. to Fr. 2,102,073 (See Ger. Offen. 2,139,016 CA 76;140923x).
CODEN: FRXXBL
DT Patent
LA French
IC A61K; C07D
CC 28-24 (Heterocyclic Compounds (More Than One Hetero Atom))
FAN.CNT 4

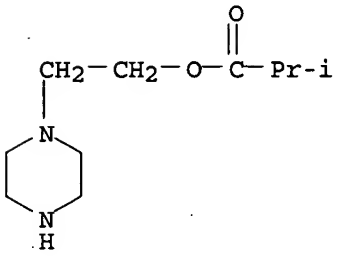
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	FR 2187338	A2	19740118	FR 1973-20407	19730605
	FR 2187338	B2	19760409		
	AU 7356683	A1	19741212	AU 1973-56683	19730607
	ZA 7303873	A	19750129	ZA 1973-3873	19730607
PRAI	CH 1972-8441	A	19720607		

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
FR 2187338	IC	A61KIC C07D

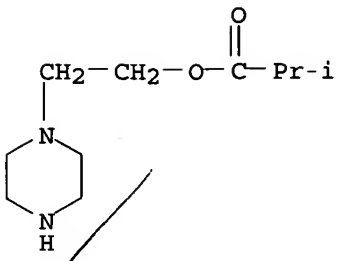
GI For diagram(s), see printed CA Issue.
AB Dibenzoxazepine derivs. I (R = COCHMe2, COBu, COCH2CHMe2, COCHMeEt, COCMe3, COCH2CH2CHMe2) were prepared by esterifying I (R = H), prepared from 2-O2NC6H4OC6H4SMe-4 in 7 steps. I had a neuroleptic and antiemetic ED50 in the apomorphine antagonism test in rats of 2.4-3.6 mg/kg i.v.
ST dibenzoxazepine acyloxyethylpiperazine; neuroleptic dibenzoxazepine; antiemetic dibenzoxazepine
IT Antiemetics
Tranquilizers
(acyloxyethylpiperazinodibenzoxazepine)
IT 3221-20-3 31329-73-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(acylation of)
IT 22416-16-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(chlorination of)
IT 31293-95-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and chlorination of)
IT 31293-89-7P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and cyclization of)
IT 52596-97-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and debenzylation of)
IT 31293-86-4P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and fluorination of)
IT 31293-91-1P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and oxidation of)
IT 51479-17-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reaction of, with hydroxyethylpiperazine)
IT 31293-88-6P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and reaction of, with phosgene)
IT 31293-87-5P
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation and reduction of)
IT 50892-72-3P 51479-07-3P 51479-09-5P 51479-11-9P 51479-12-0P
51479-14-2P 51479-16-4P **52596-98-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
IT 103-76-4
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with chlorodibenzoxazepine)
IT 47576-62-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with chloroethyl isobutyrate)
IT **51479-44-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with dibenzoxazepinone)
IT 79-30-1
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with hydroxyethylpiperazinyldibenzoxazepine derivative)
IT 33662-96-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with piperazinyldibenzoxazepine)
IT **52596-98-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 52596-98-2 HCAPLUS
CN Propanoic acid, 2-methyl-, 2-(1-piperazinyl)ethyl ester, dihydrochloride (9CI) (CA INDEX NAME)



●2 HCl

IT **51479-44-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with dibenzoxazepinone)
RN 51479-44-8 HCAPLUS
CN Propanoic acid, 2-methyl-, 2-(1-piperazinyl)ethyl ester (9CI) (CA INDEX NAME)



L33 ANSWER 7 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1974:83086 HCAPLUS
DN 80:83086
ED Entered STN: 12 May 1984
TI Dibenzoxazepines
IN Schmutz, Jean; Hunziker, Fritz; Kuenzle, Franz M.
PA Dr. A. Wander, A.-G.
SO Patentschrift (Switz.), 4 pp.
CODEN: SWXXAS
DT Patent
LA German
IC C07D
CC 28-24 (Heterocyclic Compounds (More Than One Hetero Atom))
FAN.CNT 4

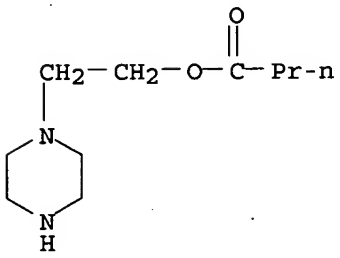
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CH 544768	A	19740115	CH 1972-15416	19700806
	US 3891647	A	19750624	US 1973-326121	19730123
PRAI	CH 1970-11922	A	19700806		
	CH 1971-7915	A	19710601		
	US 1971-166997	A2	19710728		
	CH 1972-8441	A	19720606		
	CH 1972-15415	A	19721020		
	CH 1972-15416	A	19721020		

CLASS

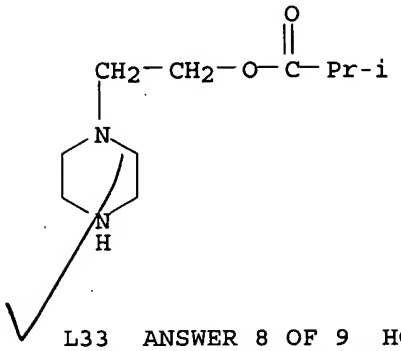
PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
CH 544768	IC	C07D
US 3891647	NCL	540/551.000; 564/417.000; 564/430.000; 568/044.000

GI For diagram(s), see printed CA Issue.
AB Dibenz[bf][1,4]oxazepines I (R1 = C3-13 alkyl; R1CO2 = oleoyloxy) (12 compds.) and their salts were prepared by treating dibenzoxazepine II with POCl3 and the resulting imino chloride III was treated with piperazine IV. III was prepared by successive chlorination of 2-nitrophenyl 4-(methylthio)phenyl ether, SbF3 treatment, hydrogenation, and COCl2 treatment, POCl3-P2O5 cyclization, and H2O2 oxidation
ST dibenzoxazepine acyloxyethylpiperazino; piperazine acyloxyethyl dibenzoxazepine
IT Ring closure and formation
(of o-phenoxyphenyl isocyanate, dibenzooxazepinone by)
IT 22416-16-6
RL: RCT (Reactant); RACT (Reactant or reagent)
(chlorination of)
IT 31293-86-4P 31293-87-5P 31293-88-6P 31293-89-7P 31293-91-1P
31293-95-5P 36079-51-3P 36079-52-4P 36079-53-5P 36274-52-9P
50892-71-2P 50892-72-3P 50892-73-4P 51479-02-8P 51479-03-9P
51479-04-0P 51479-05-1P 51479-06-2P 51479-07-3P 51479-08-4P
51479-09-5P 51479-10-8P 51479-11-9P 51479-12-0P 51479-13-1P
51479-14-2P 51479-15-3P 51479-16-4P 51479-17-5P 51479-18-6P
51479-47-1P

RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
IT 51479-40-4 51479-41-5 **51479-42-6** 51479-43-7
51479-44-8 51479-45-9 51479-46-0 51479-48-2 51479-49-3
51479-50-6 51479-51-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with chlorodibenzoxazepine)
IT **51479-42-6 51479-44-8**
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction of, with chlorodibenzoxazepine)
RN 51479-42-6 HCAPLUS
CN Butanoic acid, 2-(1-piperazinyl)ethyl ester (9CI) (CA INDEX NAME)



RN 51479-44-8 HCAPLUS
CN Propanoic acid, 2-methyl-, 2-(1-piperazinyl)ethyl ester (9CI) (CA INDEX NAME)

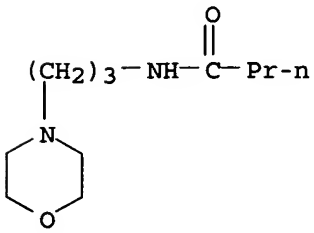


L33 ANSWER 8 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1973:505217 HCAPLUS
DN 79:105217
ED Entered STN: 12 May 1984
TI Synthesis of morpholine and homomorpholine derivatives with amide functions as potential pharmacologically active compounds
AU Kotelko, Barbara; Glinka, Ryszard
CS Med. Acad., Lodz, Pol.
SO Acta Poloniae Pharmaceutica (1973), 30(2), 135-43
CODEN: APPHAX; ISSN: 0001-6837
DT Journal
LA Polish
CC 28-24 (Heterocyclic Compounds (More Than One Hetero Atom))
GI For diagram(s), see printed CA Issue.
AB Eleven I (n = 3, R = Me, Et, Pr; n = 2, R = Ph, PhCH2, PhOCH2, 3,5-Cl2C6H3, 4-ClC6H4OCH2, 2,4-Cl2C6H3OCH2, 4- and 3-pyridyl) were prepared in 20-38% yield by heating the corresponding RCONH(CH2)nNH2 (obtained from RCO2CH2CN and 3-4 moles (H2NCH2)2 or H2N(CH2)3NH2 in MeOH at room temperature) 1.2 moles (ClCH2CH2)2O, and 2 moles Na2CO3 in Tetralin at 160-70°. A similar reaction with Cl(CH2)2O(CH2)3Cl was used to prepare 13 II (n and R as above except n = 2, R = Ph, and, in addition, n = 3, R = Ph; n = 2, R =

Ph2CH; and n = 2, R = Ph2C(OH) in 18-28% yields.
ST morpholinoalkylcarboxamide; homomorpholinoalkylcarboxamide; carboxamide morpholinoalkyl
IT 939-53-7P 1009-17-2P 4078-13-1P 4476-13-5P 6108-73-2P 6108-74-3P
6417-65-8P 7052-80-4P 15070-17-4P 17704-88-0P 36039-48-2P
42082-37-1P 49808-26-6P 49808-27-7P 49808-28-8P 49808-29-9P
49808-30-2P 49808-31-3P 49808-32-4P 49808-33-5P 49808-34-6P
49808-35-7P 49808-36-8P 49808-38-0P 49808-39-1P 49808-40-4P
49808-41-5P 49808-42-6P 49808-43-7P 49808-44-8P
49808-45-9P 49808-46-0P 49808-47-1P 49808-48-2P 49808-78-8P
49808-79-9P 49808-81-3P 49808-84-6P 49808-85-7P **49808-87-9P**
49808-89-1P 49808-90-4P 49808-91-5P 49808-92-6P 49808-93-7P
49808-94-8P 49808-96-0P 49808-97-1P 49808-98-2P 49808-99-3P
49809-00-9P 49809-01-0P 49809-02-1P 49809-03-2P 49809-04-3P
49809-05-4P 49809-06-5P 49809-07-6P 49809-08-7P 50315-20-3P
50315-21-4P 50315-22-5P 50316-41-1P 50316-42-2P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
IT 1001-55-4 7608-49-3 23839-52-3
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with 1,3-propanediamine)
IT 111-44-4 19554-99-5
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with N-acylalkylenediamines)
IT 939-56-0
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with alkylenediamines)
IT 109-76-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with cyanomethyl carboxylates)
IT 34097-58-0 49808-65-3 49808-67-5 49808-68-6 49808-69-7
49808-70-0 49808-71-1 49808-72-2 50315-18-9
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with ethylenediamine)
IT 19344-61-7
RL: RCT (Reactant); RACT (Reactant or reagent)
(reaction with methanolic ammonia)
IT 107-15-3, reactions
RL: RCT (Reactant); RACT (Reactant or reagent)
(with cyanomethyl carboxylates)
IT **49808-41-5P 49808-42-6P 49808-87-9P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 49808-41-5 HCAPLUS
CN Butanamide, N-[3-(4-morpholinyl)propyl]-, compd. with 2,4,6-trinitrophenol (9CI) (CA INDEX NAME)

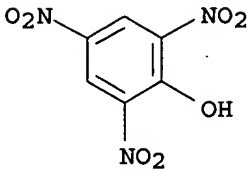
CM 1

CRN 49808-87-9
CMF C11 H22 N2 O2

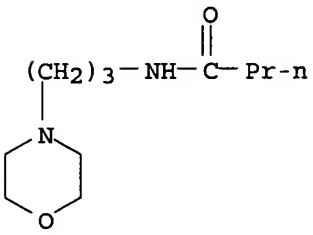


CM 2

CRN 88-89-1
CMF C6 H3 N3 O7

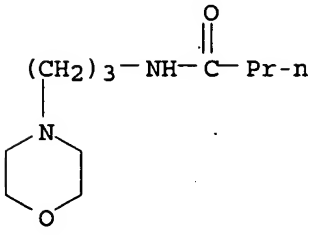


RN 49808-42-6 HCAPLUS
CN Butanamide, N-[3-(4-morpholinyl)propyl]-, monohydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 49808-87-9 HCAPLUS
CN Butanamide, N-[3-(4-morpholinyl)propyl]- (9CI) (CA INDEX NAME)



L33 ANSWER 9 OF 9 HCAPLUS COPYRIGHT 2005 ACS on STN
AN 1969:512868 HCAPLUS
DN 71:112868
ED Entered STN: 12 May 1984
TI Synthesis of hydrochlorides of N-ethanolmorpholine esters and aliphatic acids
AU Chrzaszczewska, Anna; Starski, H.
CS Univ. Lodz, Lodz, Pol.
SO Lodzkie Towarzystwo Naukowe, Wydzial III, Acta Chimica (1967), 12, 133-7
CODEN: LTNCAL
DT Journal
LA English
CC 28 (Heterocyclic Compounds (More Than One Hetero Atom))

GI For diagram(s), see printed CA Issue.

AB The title compds. are prepared by the esterification of N-ethanolmopholine-HCl (I). Thus, 16.7 g. I in 200 ml. PhMe is heated at 100° until solution Then 3 times 5 g. 100% HCO2H is added dropwise with stirring and the mixture stirred 24 hrs. giving 14 g. II (R = H), m. 154-6° (Me2CHOH). In the same way the following II are prepared (R and m.p. given): Me, 144-6° (Me2CHOH): Et, 161-3° (iso-PrOH); Pr, 96-8° (C6H6); Me2CH, 89-91° (C6H6-HCONMe2); Bu, 109-11° [tetrahydrofuran (THF)]; Me2CHCH2, 106-8° (iso-PrOH); amyl, 114-16° (THF).

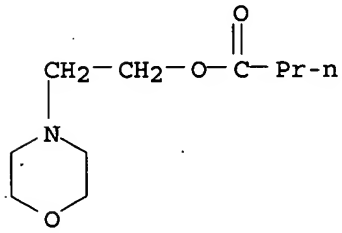
ST morpholine ethanol esters

IT 23866-04-8P 23866-05-9P 23866-06-0P **23866-07-1P** **23866-08-2P** 23866-09-3P 23866-10-6P 23866-11-7P
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

IT **23866-07-1P 23866-08-2P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)

RN 23866-07-1 HCAPLUS

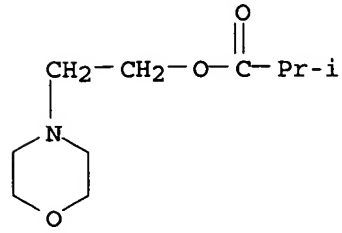
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester, hydrochloride (9CI) (CA INDEX NAME)



● HCl

RN 23866-08-2 HCAPLUS

CN Propanoic acid, 2-methyl-, 2-(4-morpholinyl)ethyl ester, hydrochloride (9CI) (CA INDEX NAME)



● HCl

=> fil uspatall
FILE 'USPATFULL' ENTERED AT 12:59:08 ON 16 MAY 2005

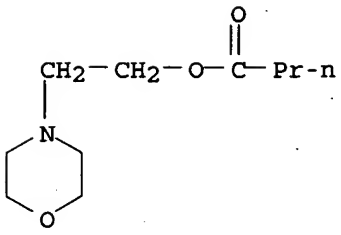
FILE 'USPAT2' ENTERED AT 12:59:08 ON 16 MAY 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

=> d l34 bib abs hitstr tot

L34 ANSWER 1 OF 6 USPATFULL on STN
AN 2004:166074 USPATFULL
TI Derivatives of butyric acid and uses thereof
IN Gilbert, Kathleen, Little Rock, AR, UNITED STATES
Fifer, E. Kim, North Little Rock, AR, UNITED STATES
PA The University of Arkansas for Medical Sciences (U.S. corporation)
PI US 2004127564 A1 20040701
AI US 2003-734919 A1 20031212 (10)
RLI Division of Ser. No. US 2002-122277, filed on 12 Apr 2002, GRANTED, Pat. No. US 6664394 Division of Ser. No. US 2000-579602, filed on 26 May 2000, GRANTED, Pat. No. US 6407107
PRAI US 1999-136579P 19990528 (60)
DT Utility
FS APPLICATION
LREP Benjamin Aaron Adler, Ph.D., J.D., Adler & Associates, 8011 Candle Lane, Houston, TX, 77071
CLMN Number of Claims: 41
ECL Exemplary Claim: 1
DRWN 12 Drawing Page(s)
LN.CNT 1175
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a series of compounds having structural formulas ##STR1##

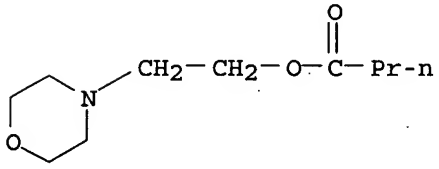
wherein n.sub.1 is 1 to 5, n.sub.2 is 1 to 4 and m is 1 to 3; X is 0 or NH; Y is CH2, O, S, NH, NR; R is selected from the group consisting a straight-chain aliphatic group, a branched-chain aliphatic group and an alicyclic group; wherein R' is selected from the group consisting of hydrogen, methyl and ethyl; when Y is O, n.sub.1 is not 1; and wherein X and R' are independently optionally substituted at C2, C3 or C4 in compounds of Fomula IV or a pharmaceutically acceptable salt thereof. Also provided is a method of inactivating antigen-specific T cells in a n individual.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **23866-07-1P 300555-03-7P 300555-04-8P**
311802-63-8P
(preparation of butyrate derivs. as inactivators of antigen-specific T cells)
RN 23866-07-1 USPATFULL
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester, hydrochloride (9CI) (CA INDEX NAME)

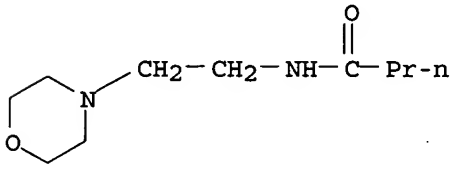


● HCl

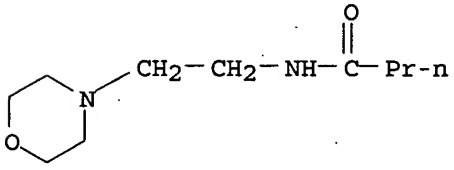
RN 300555-03-7 USPATFULL
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME)



RN 300555-04-8 USPATFULL
CN Butanamide, N-[2-(4-morpholinyl)ethyl]- (9CI) (CA INDEX NAME)



RN 311802-63-8 USPATFULL
CN Butanamide, N-[2-(4-morpholinyl)ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)



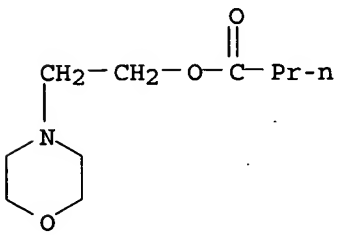
● HCl

L34 ANSWER 2 OF 6 USPATFULL on STN
AN 2002:259480 USPATFULL
TI Derivatives of butyric acid and uses thereof
IN Gilbert, Kathleen, Little Rock, AR, UNITED STATES

Fifer, E. Kim, North Little Rock, AR, UNITED STATES
PA The University of Arkansas for Medical Sciences (U.S. corporation)
PI US 2002143056 A1 20021003
US 6664394 B2 20031216
AI US ~~2002-122277~~ A1 20020412 (10)
RLI Division of Ser. No. US 2000-579602, filed on 26 May 2000, GRANTED, Pat. No. US 6407107
PRAI US 1999-136579P 19990528 (60)
DT Utility
FS APPLICATION
LREP Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071
CLMN Number of Claims: 41
ECL Exemplary Claim: 1
DRWN 12 Drawing Page(s)
LN.CNT 1170
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a series of compounds having structural formulas ##STR1##

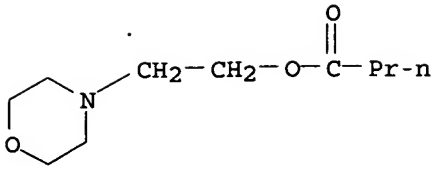
wherein n.sub.1 is 1 to 5, n.sub.2 is 1 to 4 and m is 1 to 3; X is O or NH; Y is CH2, O, S, NH, NR; R is selected from the group consisting a straight-chain aliphatic group, a branched-chain aliphatic group and an alicyclic group; wherein R' is selected from the group consisting of hydrogen, methyl and ethyl; when Y is O, n.sub.1 is not 1; and wherein X and R' are independently optionally substituted at C2, C3 or C4 in compounds of Fomula IV or a pharmaceutically acceptable salt thereof. Also provided is a method of inactivating antigen-specific T cells in a n individual.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **23866-07-1P 300555-03-7P 300555-04-8P**
311802-63-8P
(preparation of butyrate derivs. as inactivators of antigen-specific T cells)
RN 23866-07-1 USPATFULL
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester, hydrochloride (9CI) (CA INDEX NAME)

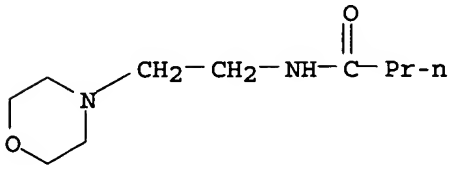


● HCl

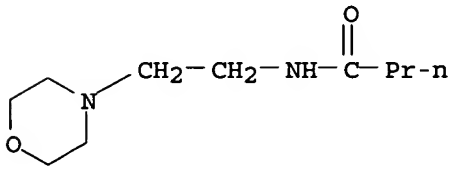
RN 300555-03-7 USPATFULL
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME)



RN 300555-04-8 USPATFULL
CN Butanamide, N-[2-(4-morpholinyl)ethyl]- (9CI) (CA INDEX NAME)



RN 311802-63-8 USPATFULL
CN Butanamide, N-[2-(4-morpholinyl)ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

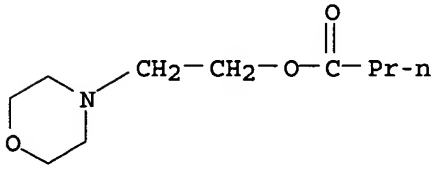


● HCl

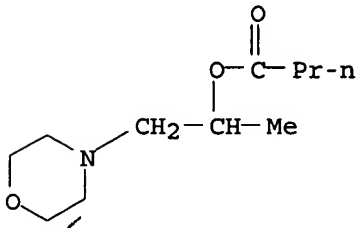
L34 ANSWER 3 OF 6 USPATFULL on STN
AN 2002:185531 USPATFULL
TI Amine compounds, resist compositions and patterning process
IN Hatakeyama, Jun, Nakakubiki-gun, JAPAN
Kobayashi, Tomohiro, Nakakubiki-gun, JAPAN
Watanabe, Takeru, Nakakubiki-gun, JAPAN
Nagata, Takeshi, Nakakubiki-gun, JAPAN
PA Shin-Etsu Chemical Co., Ltd., Tokyo, JAPAN (non-U.S. corporation)
PI US 2002098443 A1 20020725
US 6749988 B2 20040615
AI US 2001-994808 A1 20011128 (9)
PRAI JP 2000-362800 20001129
DT Utility
FS APPLICATION
LREP MILLEN, WHITE, ZELANO & BRANIGAN, P.C., 2200 CLARENDON BLVD., SUITE 1400, ARLINGTON, VA, 22201
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 1863
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel amine compounds having a nitrogen-containing cyclic structure and a hydrating group such as a hydroxy, ether, ester, carbonyl, carbonate

group or lactone ring are useful for use in resist compositions for preventing a resist film from thinning and also for enhancing the resolution and focus margin of resist.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **300555-03-7P 443796-22-3P**
(amine compds. as basic materials for resist compns.)
RN 300555-03-7 USPATFULL
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME)



RN 443796-22-3 USPATFULL
CN Butanoic acid, 1-methyl-2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME)

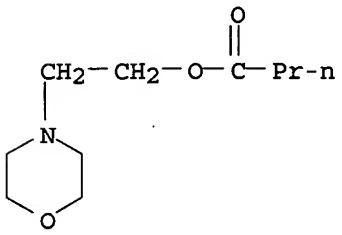


L34 ANSWER 4 OF 6 USPATFULL on STN
AN 2002:144275 USPATFULL
TI Derivatives of butyric acid and uses thereof
IN Gilbert, Kathleen, Little Rock, AR, United States
Fifer, E. Kim, North Little Rock, AR, United States
PA The Board of Trustees of the Unversity of Arkansas, Little Rock, AR, United States (U.S. corporation)
PI US 6407107 B1 20020618
AI US 2000-579602 20000526 (9)
PRAI US 1999-136579P 19990528 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Ramsuer, Robert W.
LREP Adler, Benjamin Aaron
CLMN Number of Claims: 2
ECL Exemplary Claim: 1
DRWN 21 Drawing Figure(s); 12 Drawing Page(s)
LN.CNT 1003
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a series of compounds having structural formulas ##STR1##

wherein n.sub.1 is 1 to 5, n.sub.2 is 1 to 4 and m is 1 to 3; X is O or NH; Y is CH2, O, S, NH, NR; R is selected from the group consisting a straight-chain aliphatic group, a branched-chain aliphatic group and an alicyclic group; wherein R' is selected from the group consisting of hydrogen, methyl and ethyl; when Y is O, n.sub.1 is not 1; and wherein X and R' are independently optionally substituted at C2, C3 or C4 in

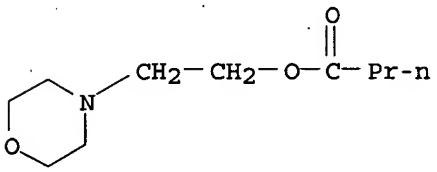
compounds of Fomula IV or a pharmaceutically acceptable salt thereof. Also provided is a method of inactivating antigen-specific T cells in an individual.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **23866-07-1P 300555-03-7P 300555-04-8P 311802-63-8P**
(preparation of butyrate derivs. as inactivators of antigen-specific T cells)
RN 23866-07-1 USPATFULL
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester, hydrochloride (9CI) (CA INDEX NAME)

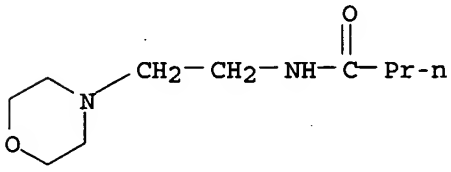


● HCl

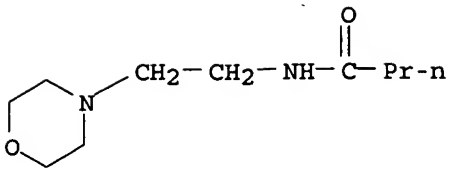
RN 300555-03-7 USPATFULL
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME)



RN 300555-04-8 USPATFULL
CN Butanamide, N-[2-(4-morpholinyl)ethyl]- (9CI) (CA INDEX NAME)



RN 311802-63-8 USPATFULL
CN Butanamide, N-[2-(4-morpholinyl)ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

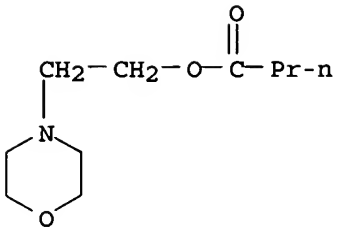


● HCl

L34 ANSWER 5 OF 6 USPAT2 on STN
AN 2002:259480 USPAT2
TI Derivatives of butyric acid
IN Gilbert, Kathleen, Little Rock, AR, United States
Fifer, E. Kim, North Little Rock, AR, United States
PA The Board of Trustees of the University of Arkansas, Little Rock, AR, United States (U.S. corporation)
PI US 6664394 B2 20031216
AI US 2002-122277 20020412 (10)
RLI Division of Ser. No. US 2000-579602, filed on 26 May 2000, now patented, Pat. No. US 6407107
PRAI US 1999-136579P 19990528 (60)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Ramsuer, Robert W.
LREP Adler, Benjamin Aaron
CLMN Number of Claims: 4
ECL Exemplary Claim: 1
DRWN 21 Drawing Figure(s); 12 Drawing Page(s)
LN.CNT 1008
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides a series of compounds having structural formulas ##STR1##

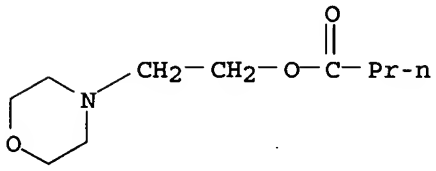
wherein n.sub.1 is 1 to 5, n.sub.2 is 1 to 4 and m is 1 to 3; X is O or NH; Y is CH2, O, S, NH, NR; R is selected from the group consisting a straight-chain aliphatic group, a branched-chain aliphatic group and an alicyclic group; wherein R' is selected from the group consisting of hydrogen, methyl and ethyl; when Y is O, n.sub.1 is not 1; and wherein X and R' are independently optionally substituted at C2, C3 or C4 in compounds of Fomula IV or a pharmaceutically acceptable salt thereof. Also provided is a method of inactivating antigen-specific T cells in an individual.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **23866-07-1P 300555-03-7P 300555-04-8P 311802-63-8P**
(preparation of butyrate derivs. as inactivators of antigen-specific T cells)
RN 23866-07-1 USPAT2
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester, hydrochloride (9CI) (CA INDEX NAME)

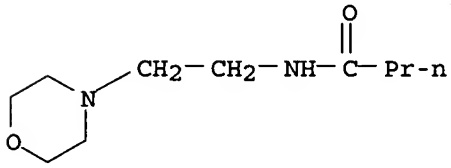


● HCl

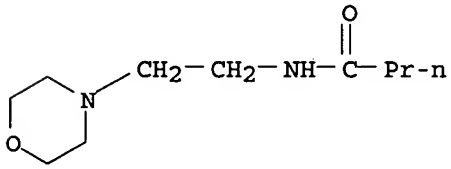
RN 300555-03-7 USPAT2
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME)



RN 300555-04-8 USPAT2
CN Butanamide, N-[2-(4-morpholinyl)ethyl]- (9CI) (CA INDEX NAME)



RN 311802-63-8 USPAT2
CN Butanamide, N-[2-(4-morpholinyl)ethyl]-, monohydrochloride (9CI) (CA INDEX NAME)

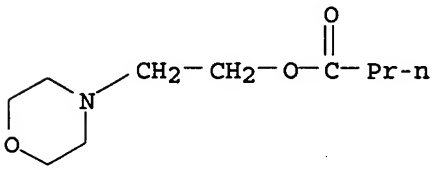


● HCl

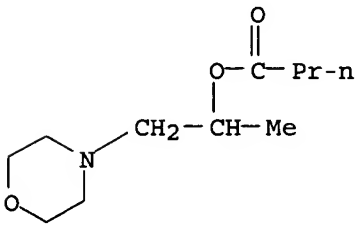
L34 ANSWER 6 OF 6 USPAT2 on STN
AN 2002:185531 USPAT2
TI Amine compounds, resist compositions and patterning process
IN Hatakeyama, Jun, Nakakubiki-gun, JAPAN

Kobayashi, Tomohiro, Nakakubiki-gun, JAPAN
Watanabe, Takeru, Nakakubiki-gun, JAPAN
Nagata, Takeshi, Nakakubiki-gun, JAPAN
PA Shin-Etsu Chemical Co., Ltd., Tokyo, JAPAN (non-U.S. corporation)
PI US 6749988 B2 20040615
AI US 2001-994808 20011128 (9)
PRAI JP 2000-362800 20001129
DT Utility
FS GRANTED
EXNAM Primary Examiner: Huff, Mark F.; Assistant Examiner: Lee, Sin J.
LREP Millen, White, Zelano & Branigan, P.C.
CLMN Number of Claims: 20
ECL Exemplary Claim: 6
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 1919
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Novel amine compounds having a nitrogen-containing cyclic structure and a hydrating group such as a hydroxy, ether, ester, carbonyl, carbonate group or lactone ring are useful for use in resist compositions for preventing a resist film from thinning and also for enhancing the resolution and focus margin of resist.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT **300555-03-7P 443796-22-3P**
(amine compds. as basic materials for resist compns.)
RN 300555-03-7 USPAT2
CN Butanoic acid, 2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME)



RN 443796-22-3 USPAT2
CN Butanoic acid, 1-methyl-2-(4-morpholinyl)ethyl ester (9CI) (CA INDEX NAME)



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E GILBERT K/AU

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L2            84 S E3-E12,E27-E30
                 E FIFER E/AU
L3            36 S E4-E6
                 SEL RN L1

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L5             9 S L4 AND (NC2OC2 OR NC2NC2)/ES
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L8               STR
L9             3 S L8
L10              STR L8
L11            1 S L10 CSS SAM
L12       882636 S (46.402.1 OR 46.383.1)/RID
L13       953133 S (NC2OC2 OR NC2NC2)/ES
L14       953133 S L12,L13
L15           28 S L10 SAM SUB=L14
L16              SCR 1839
L17           50 S L10 NOT L16 SAM SUB=L14
L18         2121 S L10 NOT L16 FUL SUB=L14
                 SAV L18 SHIAO734/A
L19          520 S L10 CSS FUL SUB=L18
                 SAV L19 SHIAO734A/A
L20          266 S L19 NOT PMS/CI
L21              STR L10
L22          181 S L21 FUL SUB=L20
                 SAV L22 SHIAO734B/A
                 DEL SHIAO734B/A
L23            9 S L8 FUL SUB=L20
                 SAV L23 SHIAO734B/A
L24              STR L21
L25              STR L24
L26            7 S L25 FUL SUB=L20
L27            6 S L26 NOT BUTENYL
                 SAV L27 SHIAO734C/A
L28           15 S L7,L23,L27

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L31            3 S L30 AND L1-L3
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L33            9 S L30-L32

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L34            6 S L28

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     FILE 'HCAPLUS' ENTERED AT 12:58:52 ON 16 MAY 2005

     FILE 'USPATFULL, USPAT2' ENTERED AT 12:59:08 ON 16 MAY 2005

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